

OFFICE MEMORANDUM

DATE: May 21, 1997

TO: District Engineers

District Field Engineers

District Construction Engineers Resident/Project Engineers

FROM: Paul F. Miller

Engineer of Construction

SUBJECT: CONSTRUCTION INSTRUCTIONAL MEMORANDUM 1997-1

Construction Value Engineering Change Proposal (VECP)

In February, the Engineering Operations Committee approved placing the Special Provision for Value Engineering Change Proposals (VECP) in all projects with an estimated cost over \$2,000,000. VECPs submitted by the Contractor are the continuation of the Value Engineering concepts, principles, and techniques applied at the construction stage of a project. Submittal of VECPs from the Contractor should promote lower costs or provide a better product, improve safety, or shorten contract time. This would be done by providing alternate construction methods than those in the contract. The modification proposed should not impair, in any manner, the essential functions or characteristics of the project including, but not limited to, service life, economy of operation, ease of maintenance, desired appearance, impacts on utilities and right of way, or the design and safety standards or significantly delay the completion of the project.

The following procedures are established to give a quick response to the Contractor while allowing the Department to evaluate the VECP. The Department's administrative cost of evaluating the VECP must be tracked so that all the benefits and costs can be determined.

a. Special Provision

The vehicle used to provide and maintain an effective program of VECPs is through Special Provision in the contract. The Special Provision provides the Contractors with monetary incentive to participate in cost saving techniques (see Attachment #A). The Department also wants to encourage VECPs where there may be no cost savings but improves the overall design or construction of a project.

b. VECP Submittal

Referring to Attachment #A, proceed as follows for evaluation and/or approval of the Contractor's VECP:

- When the Contractor submits a VECP, it must include all items required by the Special Provision shown in Attachment #A. It should be submitted to the Project Engineer with five copies. The four extra copies will go to the Field Engineer, the District Engineer, and two copies to the Lansing Construction office (attn: Katharine Hulley). The two Lansing Construction copies will be used by Lansing Construction staff and the Value Engineering Decision Team (VEDT). The VEDT membership will be Division Engineers/Administrators or their representatives. Permission may be granted for the Contractor to present the VECP orally, but all the data needed for evaluation shall be submitted in writing.
- 2. Projects that are non-exempt should be coordinated directly with the Federal Highways Administration (FHWA). When the VECP is received by the Resident/Project Engineer, they will call the FHWA Field Operations Engineer responsible for that project. Based on the scope and content of the VECP, the FHWA Engineer will determine what approvals FHWA will need to give. For exempt projects, no FHWA approval is needed.
- 3. The Resident/Project Engineer shall evaluate the VECP. The Project Engineer's recommendation and/or decision must be made based on information and coordination with Design, the Project Development Engineer, and/or Project Manager, Traffic and Safety, or the Lansing Construction Office, as appropriate. After the Resident/Project Engineer's documents their review and action, along with supporting information, the VECP will proceed as outlined in Table A. Each person should then document their decision for the next reviewer.
- 4. All MDOT personnel shall keep track of the time they spend reviewing the VECP. This information shall be forwarded to and gathered by Lansing Construction. The information will be used to track administrative costs and improve the VECP process.
- 5. If VEDT action is required, this will be coordinated through Lansing Construction.
- 6. If the VECP is approved, the Project Engineer shall notify the Contractor within the proposed change deadline and shall prepare and submit the necessary authorization. NOTE: a contract item, "Value Engineering", has been established so that cost savings can be tracked. This should be used as the final approved cost in the authorization. Do not just change the regular contract items or we will lose our ability to do annual reviews. Payment shall be in accordance with the special provision of the contract.

- 7. If the proposed change is rejected, the Project Engineer shall send written notification to the Contractor and shall include the reasons for the rejection. The notification should also note, as stated in the special provision, that the decision is final and there are no appeals.
- 8. Acceptable VECPs shall be utilized in the design of future applicable projects and applicable design standards. It should be the responsibility of the VEDT to initiate applicable specifications and design standard changes.

An annual report will be made to summarize costs and savings of the program.

Engineer of Construction

PFM:KJH:tml attachments

cc: Lansing Construction Division Engineers

Lansing Construction Division Technicians

POST on Bulletin Board

Engineering Services Division

M & T Division

Design Division

OEO

G. Taylor

T. Coleman

MRBA

MAPA

MCPA

MCA

MAA

H. Linne

P. Fhaner

R. Beckon

P. Rang

FHWA

AUC

Subject Index: Special Provisions

Table A

TOTAL SAVINGS	PROJECT ENGINEER	FIELD ENGINEER	ENGINEER OF CONSTRUCTION	VEDT
\$ 100,000 or less*	Final Approval or Rejection (by day 14)	Сору	Сору	Сору
\$ 100,001 to \$ 250,000	Recommend Approval or Rejection (by day 11)	Final Approval or Rejection (by day 14)	Сору	Сору
\$ 250,001 to \$ 1,000,000	Recommend Approval or Rejection (by day 10)	Copy (by day 12)	Final Approval or Rejection (by day 14)	Сору
\$ 1,000,001 or greater	Recommend Approval or Rejection (by day 9)	Сору	Сору	Final Approval or Rejection Copy (by day 14)

NOTE: Per procedures, all groups will have the information from the Contractor to review for the full 14 days prior to making a decision

ATTACHMENT A

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

SPECIAL PROVISION FOR VALUE ENGINEERING CHANGE PROPOSAL (VECP)

CD/KJH 1 of 3 04/24/96

C:APPR:JTL:PAL 04/25/96

Section 1. The Contractor is encouraged to submit to the Project Engineer, in writing, Value Engineering Change Proposals (VECPs) for modifying the plans, specifications, or other requirements of this contract for the purpose of reducing construction cost or providing a better product, improving safety or shortening contract time. The modification proposed shall not impair, in any manner, the essential functions or characteristics of the project including, but not limited to, service life, economy of operation, ease of maintenance, desired appearance, impacts on utilities and right of way, or design and safety standards or significantly delay the completion of the project. Except as modified by Section 13, VECPs shall contain the following information:

- a. A description of both the existing contract requirements for performing the work and the proposed changes.
- b. An itemization of the contract requirements that must be changed if the proposal is adopted.
- c. A detailed estimate of the cost of performing the work under the existing contract and under the proposed change. The detailed estimate shall include a list of the contract items of work affected by the proposed changes, including any quantity variation.
- **Section 2.** VECPs will be considered only when they will not significantly delay the completion of the project or delete work without a related enhancement to the project. The Department shall not be liable to the Contractor for failure to accept or act upon any VECP nor for any delays to the work attributable to any such proposal.
- **Section 3.** The Contractor shall continue to perform the work in accordance with the requirements of the contract until a work order and authorization incorporating the VECP has been approved. If a work order and authorization has not been approved by the specified date in the Contractor's VECP, the VECP shall be deemed rejected unless the decision date has been extended by mutual agreement of both parties.

- **Section 4.** The Department shall be the sole judge of the acceptability of a VECP and of the estimated net savings in construction costs from the adoption of all or any part of the VECP. In determining the estimated net savings, the right is reserved to disregard the contract prices if, in the judgment of the Engineer, such prices do not represent a fair measure of the value of work to be performed or to be deleted. The Department's decision is final and there is no appeal. By submitting the VECP, the Contractor agrees not to hold the Department liable for its decision or for any delays to the work attributable to the VECP.
- **Section 5.** The Department reserves the right, if it deems such action appropriate, to require the Contractor to share in the Department's cost of investigating the VECP as a condition for considering such VECP. If this condition is imposed, the Contractor shall indicate acceptance in writing, and the acceptance shall constitute full authority for the Department to deduct amounts payable from any monies due or that may become due to the Contractor under the contract.
- **Section 6.** If the Contractor's VECP is accepted in whole or in part, the acceptance will be by a work order and authorization which should specifically state that it is executed pursuant to this special provision. The work order and authorization will incorporate the necessary changes in the plans and specifications and will include any conditions upon which the Department's approval is based, if appropriate. The work order and authorization will include the price for performing those items of work affected by the work order and authorization and the estimated net savings in the cost of performing the work attributable to the VECP. The Contractor will be paid 50 percent of the actual net savings of the construction cost, as detailed in Section 12, at the completion of the work affected by the work order and authorization.
- **Section 7.** Acceptance of the VECP shall not extend the time of contract completion unless specifically provided for in the work order and authorization.
- **Section 8.** The amount specified in the work order and authorization shall constitute full compensation to the Contractor for the VECP and the performance of that work.
- **Section 9.** The Department expressly reserves the right to use all or any part of a VECP for general use on other contracts administered by the Department without obligation or compensation of any kind to the Contractor except as noted in Section 12. If an accepted VECP is adopted for general use, only the Contractor who submitted the first VECP shall be eligible for compensation pursuant to this section. The Contractor will be awarded the compensation only for this contract.
- **Section 10.** The Contractor may request the return of information submitted with a VECP if the proposal is rejected. Such request shall be in writing and submitted with the VECP

If the VECP is accepted, this request shall be void and the Department may use or disclose in whole or in part any information necessary to utilize the VECP.

Section 11. Prior to approval, the Engineer may modify a VECP, with the concurrence of the Contractor, to enhance it or make it acceptable. If any modification increases or decreases the net savings resulting from the VECP, the Contractor's share shall be determined upon the basis of the modified VECP.

Section 12. All VECPs shall be submitted to the Project Engineer with five copies. If so desired, the Contractor may submit a conceptual VECP for approval stating the basic concept and approximate cost savings. Approval or disapproval of conceptual VECPs or final VECPs shall be granted within 14 (fourteen) calendar days of receipt of the VECP. The following computation schedule will apply to acceptable VECPs.

Actual Net <u>Total Savings</u>	MDOT Share	Contractor's Share
Less than \$100,000.00 \$100,000.00 or more	\$50,000.00 50%	Total Savings minus \$50,000.00 50%

Section 13. The use of this provision should not restrict the contractor from proposing any improvement even if it does not result in cost savings.